Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Recommendations of the Independent Panel	)	EB Docket No. 06-119
Reviewing the Impact of Hurricane Katrina on	)	WC Docket No. 06-63
Communications Networks	)	
	)	
	)	

ORDER

Adopted: May 31, 2007 **Released: June 8, 2007**

By the Commission: Chairman Martin and Commissioners Copps, Adelstein, Tate and McDowell issuing separate statements.

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I. INTRODUCTION

1. In this Order, we direct the Public Safety and Homeland Security Bureau (PSHSB) to implement several of the recommendations made by the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks (Katrina Panel). We further order PSHSB to report to us on its efforts three months from the date of release of this Order and nine months from the date of release of this Order. We also adopt rules requiring some communications providers to have emergency/back-up power and to conduct analyses and submit reports on the redundancy and resiliency of their 911 and E911 networks. Finally, we extend limited regulatory relief from Section 272 of the Communications Act of 1934, as amended, accorded last year by the Wireline Competition Bureau (WCB).

II. BACKGROUND

2. Hurricane Katrina struck the Gulf Coast of the United States on Monday, August 29, 2005, causing extraordinary destruction to communications companies' facilities and communications services upon which citizens rely, in Alabama, Louisiana, and Mississippi. Hurricane Katrina knocked out more than three million customer phone lines in the region. The wireline telecommunications network sustained enormous damage – dozens of central offices and countless miles of outside plant were damaged or destroyed as a result of the hurricane or the subsequent flooding. Local wireless networks also sustained considerable damage – more than a thousand cell sites were knocked out of service by the hurricane. In the aftermath of the hurricane, more than thirty-five Public Safety Answering Points (PSAPs) were out of service, and some parishes in Louisiana remained without 911 or enhanced 911 (E911) service for weeks.[1]

3. In the aftermath of Hurricane Katrina, the Commission took a number of steps to assist the public safety community and the industry to restore communications. For example, the Commission staff reached out to industry to assess the status of their operations and coordinated with other federal agencies to address FCC licensees' needs with respect to restoration of their systems. In addition, the Commission instituted an expedited process of approving requests for Special Temporary Authority, waivers and other regulatory relief to FCC licensees.

4. In January 2006, Chairman Kevin J. Martin established the Katrina Panel pursuant to the Federal Advisory Committee Act, Public Law 92-463, as amended.[2] The mission of the Katrina Panel was to review the impact of Hurricane Katrina on communications infrastructure in the areas affected by the hurricane and to make recommendations to the Commission regarding ways to improve disaster preparedness, network reliability and communications among first responders such as police, fire fighters, and emergency medical personnel.[3]

5. The Katrina Panel submitted its report on June 12, 2006. The Katrina Panel's report described the impact of the worst natural disaster in the Nation's history, as well as the overall public and private response and recovery efforts. The Commission's goal is to take the lessons learned from that disaster and build upon them to promote more effective, efficient response and recovery efforts, as well as heightened readiness and preparedness.

6. To accomplish this goal, the Commission issued a Notice of Proposed Rulemaking (*Notice*) on June 19, 2006 inviting comment on what actions the Commission should take to address the Katrina Panel's recommendations.[4] Noting that several of the Katrina Panel's recommendations involved Commission actions that were not dependent on a rulemaking or measures that may not fall within the Commission's statutory authority and jurisdiction, the *Notice* asked commenters to note what actions would fall within the Commission's statutory authority and jurisdiction, and what the Commission could do to encourage the appropriate entities to take action. The *Notice* also generally sought comment on whether, in adopting any of the Katrina Panel's recommendations, any additional safeguards should be implemented to limit disclosure of sensitive infrastructure information or commercial information to

[1] *See generally* Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, *Report and Recommendations to the Federal Communications Commission*, 5-31 (Katrina Panel Report); *see also* Federal-State Joint Board on Universal Service, Order, 20 FCC Rcd 16883, para. 2 (2005) (*Katrina USF Order*).

[2] 5 U.S.C. App. 2 (1988).

[3] *See* the Katrina Panel Charter *available at* http://www.fcc.gov/eb/hkip/HKIPCharter.pdf (last visited June 15, 2006); *see also* the Notice of Establishment of the Commission's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, 71 Fed. Reg. 933 (2006).

[4] *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, Notice of Proposed Rulemaking, EB Docket No. 06-119, 21 FCC Rcd 7320 (2006) ("*Notice*").

prevent exposing potential targets to wrongdoers and subjecting regulated entities to competitive harm. In addition, the *Notice* asked whether the Commission, in implementing the Panel's recommendations, should rely on voluntary consensus recommendations as advocated by the Panel or whether it should rely on other measures for enhancing readiness and promoting more effective response efforts. The *Notice* also sought comment on whether and how the Commission can assist organizations whose primary business is not communications (*e.g.*, hospitals, nursing homes, day care facilities, and so forth) with developing communications plans for an emergency.

7. On July 26, 2006, the Commission issued a Public Notice asking commenters to address the applicability of the Katrina Panel's recommendations to all types of natural disasters (*e.g.*, earthquakes, tornadoes, hurricanes, forest fires) as well as other types of incidents (*e.g.*, terrorist attacks, influenza pandemic, industrial accidents). The Public Notice also asked parties to address whether the Panel's recommendations are broad enough to take into account the diverse topography of our Nation, the susceptibility of a region to a particular type of disaster, and the multitude of communications capabilities a region may possess. The Commission received over 100 comments and reply comments in response to the *Notice*.

III. DISCUSSION

A. Preparation for Disasters

8. Readiness Checklists. The Katrina Panel recommended that the Commission work with and encourage each industry sector, through their organizations or associations, to develop and publicize sector-specific readiness recommendations. This recommendation further stated that "such a checklist should be based upon relevant industry best practices as set forth by groups such as the Media Security and Reliability Council ("MSRC") and the Network Reliability and Interoperability Council ("NRIC"). The Katrina Panel also stated that such checklists should include: (1) developing and implementing business continuity plans; (2) conducting exercises to evaluate business continuity plans and train personnel; (3) developing and practicing a communications plan to identify "key players" and multiple means of contacting them; and (4) routinely archiving critical system backups and providing for their storage in "secure off-site" facilities.[5]

9. Commenters generally supported the creation of voluntary sector-based readiness checklists with input from industry.[6] Some commenters specifically encouraged development by industry trade associations with encouragement from the Commission.[7] In fact, one such readiness checklist has already been developed for the telecommunications industry by the Alliance for Telecommunication Industry Solutions ("ATIS") Network Reliability Steering Committee ("NRSC").[8]

10. Testimony before the Katrina Panel revealed that industry sectors had not adequately

[5] *Katrina Panel Report* at 31.

[6] Some commenters noted that providers should be afforded the flexibility to create practices tailored to their unique circumstances. *See, e.g.*, BellSouth Comments at 8-9; T-Mobile USA Reply Comments at 4-5; United States Telecom Association Comments at 9-12. Some commenters asserted that the Commission should require that regulated communications entities develop and maintain business continuity plans for significant disruptions. *See* AT&T Comments at 4-5; Adolph Holmes Comments at 3. However, several others opposed this and encourage industry self regulation regarding development of business continuity plans. *See, e.g.*, Sprint Nextel Comments at 7-8.

[7] *See, e.g.*, Motorola Comments at 3-4; NAB Comments at 5-6.

[8] On October 19, 2006, the NRSC adopted a Hurricane Checklist and submitted that checklist in the docket for the Katrina Panel NPRM (EB Docket 06-119). *See* http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6518531475. Commenters noted that NRSC had been developing readiness checklists for the telecommunications industry.

prepared for a disaster of Hurricane Katrina's magnitude. We find that implementation of the Panel's recommendations in this area will improve the security and reliability of the Nation's communications infrastructure. Hence, we direct the Public Safety & Homeland Security Bureau to work with the industry to develop voluntary industry-sector readiness checklists to ensure that industry is better prepared for future disasters and emergencies, including an influenza pandemic. MSRC and NRIC best practices and other materials should serve as a foundation for developing these checklists. To ensure that the checklists take into account the needs of different types of companies, we direct the Bureau to reach out to a variety of trade organizations including those representing small communications companies. The Bureau should also publicize and promote implementation of the readiness checklists once developed, for example, by placing the readiness checklists on the Bureau's website and encouraging use of these checklists at summits and conferences.

11. Awareness Program on Alternative Technologies. In the *Notice*, we sought comment on the Katrina Panel's recommendation that we act to enhance the public safety community's awareness of non-traditional emergency alternative technologies that might be of value as back-up communications systems in a crisis. In particular, the Panel mentioned satellite systems and two-way paging systems as especially resilient to disaster. Other technologies, such as WiFi and WiMAX, were cited for their ability to restore service rapidly. In addition to a lack of knowledge about these alternatives, the Panel described the need that members of the public safety community be trained in their use prior to disasters.[9] The Katrina Panel suggested that the lack of such training may have contributed to these technologies being overlooked during Katrina, and such training would have to occur prior to a crisis since the days following such an event are consumed with far more pressing issues.

12. Commenting parties favored the Katrina Panel's recommendation that the Commission work to enhance the public safety community's awareness of alternative communications technologies. Many emphasized the importance of satellite technologies,[10] with most of these commenters stressing the need for training in alternative technologies before disaster strikes.[11] Motorola also emphasizes that ". . . these important technologies will be of little help unless public safety trains on them frequently."[12] SIA and USA Mobility suggested that the Commission improve awareness through a combination of fact sheets and web site distribution of relevant information about alternative technologies.[13] Several commenters suggested that the public safety community be educated about the applicability of amateur radio in a crisis.[14] MAET observed that digital television datacasting is an alternative technology that

[9] The Katrina Panel learned that a variety of non-traditional, alternative technologies could have served as effective, back-up communications for public safety until primary systems were repaired during Hurricane Katrina. The Katrina Panel noted that satellite infrastructure was generally unaffected by the storm and could have provided a viable back-up system. Two-way paging operations also remained generally operational during the storm. These paging operations did provide communications capabilities for some police, fire emergency medical personnel and could have been more widely utilized. The Katrina Panel noted that other types of non-traditional but easily deployable technology, such as WiFi and WiMax, or self-contained communications vehicles, could also have been effectively utilized. The Katrina Panel noted that these technologies appear deserving of exploration as back-up communications options to primary public safety systems. *Katrina Panel Report* at 24.

[10] Globalstar Reply Comments at 2-5; Inmarsat Comments at 2-4; Iridium Comments at 2-5; MSV Comments at 4; and SIA Comments at 3-8.

[11] Globalstar Reply Comments at 6; Inmarsat Comments at 6; Iridium Comments at 5-7; and MSV Comments at 8-9.

[12] Motorola Comments at 4.

[13] SIA Comments at 9-10; USA Mobility Comments at 10-12.

[14] Society for Preservation of Amateur Radio Comments at 4; Whitman Comments at 3.

should not be overlooked for emergency communications.[15]

13. The Commission agrees that improving the public safety community's knowledge of, and training in, alternative technologies would improve preparedness for future crises. We direct PSHSB to develop and implement an awareness program to educate public safety agencies about alternative technologies and to encourage agencies to provide regular training on any alternative technologies to be used. The program could include: (1) web pages describing alternative technologies and how they work; (2) hosting summits and conferences that include discussion of alternative technologies; (3) educating public safety agencies about alternative technologies at events sponsored by third parties; and (4) making staff available to provide advice to public safety agencies on issues regarding specific technologies.[16] Commenters have suggested a number of technologies be included in this program, including two-way paging, satellite, IP-based systems, WiFi and WiMAX. We agree that these technologies as well as others to be determined by PSHSB should be included.

14. Outreach Program for Emergency Medical and Other Communities. The Katrina Panel recommended that the Commission work to assist the emergency medical community to facilitate the resiliency and effectiveness of their emergency communications systems. Specifically, the Katrina Panel stated that the Commission should: (1) educate the emergency medical community about emergency communications and help to coordinate this sector's emergency communications efforts; (2) work with Congress and other appropriate federal departments and agencies to ensure emergency medical personnel are treated as public safety personnel under the Stafford Act; and (3) support the U.S. Department of Homeland Security's (DHS) efforts to make emergency medical providers eligible for funding for emergency communications equipment under the State Homeland Security Grant Program.[17] In the *Notice*, we also sought comment on whether and how the Commission can assist organizations whose primary business is not communications (*e.g.* hospitals, nursing homes, day care facilities) with developing communications plans for an emergency.[18] Commenters generally support these recommendations.

15. The PSHSB provides guidance and assistance to state and local governments, health care providers and law enforcement agencies on the use of Land Mobile Radio (LMR) equipment and systems, licensing requirements, and spectrum and frequency use for public safety emergency communications. The PSHSB continues to provide assistance to various stakeholder groups in their efforts to ensure that they have operable, reliable, resilient and redundant emergency communications systems in place. In 2006, several state and regional hospital associations ran on-line articles describing the Commission's expanded outreach to the health care sector regarding emergency communications, noting that the PSHSB is committed to working closely with the nation's health care providers to further strengthen emergency response capabilities and preparedness.[19] As discussed further *infra* at paragraphs 45–48 the Commission has also conducted outreach to encourage the emergency medical community and others to enroll in priority communications service programs.

16. We direct PSHSB to continue these efforts, including its coordination with the Department of Health and Human Services (HHS) in the area of health care emergency preparedness as it

[15] Mississippi Authority for Educational Television (MAET) Comments at 4-5.

[16] As suggested by one commenter, PSHSB should also encourage public safety entities to consider whether pooling communications funds could help better prepare for future emergencies. *See* Globalstar Comment at 7.

[17] The Katrina Panel also recommended that the Commission educate the emergency medical community about the various priority communications services (*i.e.*, GETS, WPS and TSP) and urge them to subscribe. This recommendation is addressed *infra* at ¶¶45-48.

[18] *Notice* at para. 10.

[19] http://mhanewsnow.typepad.com/prepared/.

relates to communications. PSHSB should continue to educate and encourage the ability of health care providers to employ a plurality of communications systems (*e.g.*, land mobile relay systems, satellite communications, and/or high frequency communications) on premises, outside of their facility, and facility-to-facility. PSHSB should also work with DHS and other federal agencies to ensure emergency medical personnel are treated as public safety personnel under the Stafford Act. This recommendation is critical because the medical sector will be supporting first responders and potential disaster victims.

17. We further direct PSHSB to work with the Nation's health care, education and business communities to include, in their business continuity planning, robust emergency communication plans that ensure that these entities will be able to function during emergencies such as an influenza pandemic.[20] Such emergencies could result in sudden and significant shortages of personnel, changes in communications traffic, possible disruptions to communications networks (*i.e.*, due to increased telecommuting by the nation's workforce and society in general during an influenza pandemic), and lack of manpower to immediately repair affected communications networks. PSHSB has already begun efforts to establish a new federal advisory committee that will replace NRIC and MSRC and will address, *inter alia*, communications issues related to an influenza pandemic. PSHSB has also started to assemble information regarding pandemic influenza to place on its website. We direct PSHSB to continue with these efforts. In particular, PSHSB should update its website as soon as possible to include information that addresses pandemic influenza and how to prepare communications systems for such an emergency. The website should include links to other relevant government websites, such as http://www.pandemicflu.gov.

18. Monitoring of Situational Awareness During Disasters. The Katrina Panel observed that there was often a lack of clarity about which federal agency was responsible for collecting outage information and that competing requests for such information at the federal, state and local levels was distracting to restoration efforts and added to confusion about agency roles.[21] In the *Notice*, we sought comment on the Katrina Panel's recommendation that the Commission coordinate all federal outage and infrastructure reporting requirements in times of crisis, functioning as a single repository and contact with consistent data collection procedures. We asked parties to comment on the appropriate content of such emergency outage reports, their format, frequency, distribution and related issues. We also asked parties to comment on whether additional safeguards should be put into effect to address the potential disclosure of commercially sensitive information to avoid potential harm to communications providers or others.[22]

19. The vast majority of commenting parties agreed with the Katrina Panel's recommendation that the Commission serve as a single repository for outage information and implement appropriate safeguards to protect sensitive information that would be provided in such instances.[23] DHS agrees that a central repository for network outage information during a disaster is necessary and suggests that a rulemaking is necessary to facilitate outage reporting to such a repository to improve NS/EP

[20] A pandemic influenza occurs when a novel strain of the virus appears that causes readily transmissible human illness for which most of the population lacks immunity. History shows that influenza pandemics typically occur with very little warning and hit wide geographic areas in multiple waves, lasting two to three months at a time. *See* CDC Influenza Pandemic OPLAN (20 December 2006) at 11 which can be found at http://www.cdc.gov/flu/pandemic/pdf/cdc_oplan_122006.pdf.

[21] *Katrina Panel Report* at 21.

[22] *See Notice* at 4.

[23] *See* ATIS Comments at 5; Bechtel Comments at 10; BellSouth Comments at 13-14; Cox Comments at 17-18; Named State Broadcasters Association Reply Comments at 3; NAB Comments at 4; NCTA *et al* Comments at 21; PRT Comments at 8; Qwest Comments at 6-7; SIA Comments at 10-11; Sprint Nextel Comments at 10-12; T-Mobile Reply Comments at 6-8; Union Telephone Reply Comments at 8-9; US Telecom Association Comments at 17-18; Verizon Comments at 17.

programs.[24] The National Telecommunications and Information Administration (NTIA) supports the Panel's recommendation to the extent that it does not include Federal communications system outages and suggests that the outage database be maintained by the Commission representative to the Joint Field Office (JFO).[25] Several commenting parties urged the Commission to ensure that the data collection effort is coordinated with the National Communications System (NCS) and the National Coordinating Center for Telecommunications[26] (NCC) and conducted in a way that does not alter the NCC's role as the "primary entity in the federal government for coordinating communications network recovery and information sharing among affected industry members."[27] Commenting parties urged the Commission to implement the steps necessary to protect network outage information from unauthorized disclosure.[28] Commenters also encouraged the Commission to work proactively with state and local entities on a process to share outage information that preserves appropriate confidentiality safeguards, thereby minimizing duplicative requests for such information from different sources.[29] Others encouraged the Commission to work with industry prior to the onset of a disaster to select data fields that are necessary to support emergency management and systems that facilitate data collection,[30] and asserted that the decisions about what data to collect should be balanced against the burden that it would impose on communications providers that are actively engaged in restoration efforts.[31] SIA suggested that reporting entities maintain a method of submitting outage data to the Commission during a disaster even if their primary reporting facility is impaired and urges the Commission to encourage the use of satellite technology for this purpose.[32] NENA suggests that the Commission conduct detailed analyses of the 911 outage data that it routinely collects pursuant to Part 4 and ". . . work with appropriate entities to mitigate these conditions where appropriate."[33]

20. We agree with the Katrina Panel that the Commission should serve as the central point of contact for communications outage information during major events and should provide access to this information to other agencies. The Commission has extensive experience in this area both through its collection of outage information pursuant to Part 4 of the Commission's rules (outage reporting requirements) and from its efforts to collect situational awareness information from licensees in the aftermath of the 2005 hurricanes. Moreover, we note that, prior to the Katrina Panel's Report, PSHSB staff had already begun working with the communications industry and the NCS on ways to streamline the process used to collect situational awareness information from FCC licensees during emergencies. Indeed, PSHSB is now in the late stages of developing a system and process for collection of this information. Under the process contemplated by the PSHSB staff, communications companies serving areas affected by disasters could voluntarily submit information regarding, *inter alia*, the status of their

[24] DHS Comments at 5-6.

[25] NTIA Ex Parte at 2.

[26] ATIS Comments at 5; Qwest Comments at 6-7; Union Telephone Reply Comments at 8-9; DHS Comments at 5-6.

[27] AT&T Comments at 5. We note that NCC is not part of the Federal government.

[28] AT&T Comments at 5-6; BellSouth Comments at 14; Cox Comments at 18; Iridium Comments at 8-9; Motorola Comments at 5; SIA Comments at 10-11; Sprint Nextel at 10-12.

[29] AT&T Comments at 6-9; T-Mobile Reply Comments at 6-8; US Telecom Association Comments at 17-18.

[30] AT&T Comments at 6-7; Cox Comments at 17; Motorola Comments at 5; Qwest Comments at 6-7; Sprint Nextel at 10-12; T-Mobile at 6-8; DHS Comments at 5-6.

[31] Cox Comments at 17-18; CTIA Comments at 15; NCTA *et al* Comments at 21; PRT Comments at 8; SIA Comments at 10-11; Union Telephone Reply Comments at 8-9.

[32] SIA Comments at 10-11.

[33] NENA Comments at 17.

operations, the status of their restoration efforts, their power status (i.e., are they operating based on commercial power, a generator or battery power) and their use of fuel. The information submitted would be accorded confidential treatment, and would be shared with NCS on a confidential basis. This information would allow the Commission and other governmental agencies to not only track the status of communications companies' operations in the aftermath of a disaster, but also their restoration status. The information could also be used to determine communications companies' needs (*e.g.*, generator, fuel).[34]

21. We direct PSHSB to continue working with NCS and the communications industry, including the broadcast and cable industries, to resolve any outstanding issues in order to facilitate the activation of the system as soon as possible. The Bureau should also work to obtain any necessary regulatory approvals for collection of this information as soon as possible.[35] Finally, we direct the Bureau to work with the communications industry, NCS and state government agencies to address whether information submitted by the industry should be shared with state governments.[36]

22. We decline to initiate a rulemaking at this time to make the outage reporting process mandatory. The voluntary process that was put in place during Katrina provided the necessary information on a timely basis. Furthermore, a mandatory process would be less flexible and would not adapt well to the unique needs of a particular crisis. For these reasons we find that a voluntary situational awareness process is more effective during disasters. Finally, we note that PSHSB currently conducts the analyses of 911 outage data recommended by NENA, including coordination with appropriate entities and industry bodies to effectuate improvements in 911 reliability where appropriate.

23. Automatic Special Temporary Authority and Waiver Relief. The *Notice* sought comment on the Katrina Panel's recommendation that the Commission establish a prioritized system by which affected parties could automatically be granted waivers of certain regulatory requirements, or be granted automatic Special Temporary Authority (STA) in a particular geographic area if the President declares that area to be a "disaster area."[37] The Katrina Panel stated that, as a condition of such waivers or STAs, the Commission could require verbal or written notification to Commission staff contemporaneously with activation or promptly after the fact. The Katrina Panel also recommended that the Commission examine expanding the on-line filing opportunities for STA requests. In this recommendation, the Katrina Panel also included a list of "possible rule waivers and STAs to study for this treatment."[38] For the reasons indicated below, we have concluded not to automate the waiver and STA process.

24. Although most commenters supported this recommendation, few commented on how such an automatic waiver/STA process would work or be structured. Further no commenter asserted that the manner in which the Commission expedited the grant of waivers and STAs during the 2005 hurricanes was not effective.[39] We believe that, on balance, public safety would be better served by an

[34] This process is separate from the mandatory reporting requirements that apply to certain communications carriers under Part 4 of the Commission's rules, 47 C.F.R. Part 4.

[35] *See, e.g.*, Paperwork Reduction Act, 44 U.S.C. § 3501, *et seq.*

[36] We take no action on SIA's recommendation that the Commission urge terrestrial carriers to apply satellite technology as a back-up to their primary reporting facilities, noting that terrestrial carriers are likely to be aware of a number of alternative reporting mechanisms that could be so applied and will use the ones that best suit their needs.

[37] *See Notice*, 21 FCC Rcd at 7320, ¶9; *Katrina Panel Report* at 32.

[38] *See Katrina Panel Report* at 32-33.

[39] Rather, commenters such as the Association of Public Television Stations (APTS) noted that "[t]he Commission was particularly responsive to these kinds of waiver requests in the aftermath of Katrina . . ." APTS Comments at 12.

expedited review, rather than a fully automated system. Although we wish to relieve all licensees of unnecessary regulatory burdens during an emergency, we are concerned that a general policy of allowing the automatic grant of STAs and waivers of operational requirements could have serious consequences.

25. For example, without minimal Commission review, an automatic STA could allow operations of a new facility using spectrum already in use by an essential communications provider and thereby inadvertently cause essential communications to fail. We believe that it would be far easier, and more consistent with public safety to grant expedited review of an STA application than to try to undo an automatic STA once operations have begun. Further, the declaration of a "presidential disaster area" does not appear to be a sufficient basis, by itself, to grant an STA or waiver, whether automatically or otherwise.[40] For example, there could be instances where the communications infrastructure in a Presidentially declared disaster area remains intact. In such a case, an STA or waiver may be unwarranted. On the other hand, there may be situations where there is damage to a telecommunications carrier's infrastructure in an area that is never declared a disaster area. Thus, an automatic STA or waiver process based on a Presidentially declared disaster area could be overinclusive in some cases and underinclusive in others. For the same reason we disagree that the triggering by a licensee of its emergency plan generally should act as a trigger for automatic STAs or waivers. There may also be legal impediments to automatic STAs for Title III authorizations under Sections 308(a) and 309(f) of the Communications Act. Finally, we agree with NTIA that, in an emergency, the close coordination that is required between the Commission and NTIA regarding the use of shared Federal/non-Federal bands and shared spectrum management responsibilities precludes a fully automated waiver/STA process.[41] Accordingly, we conclude that some level of Commission review is necessary during an emergency to ensure that STAs or waivers are properly granted.

26. We believe, at this time, the best approach would be to use an expedited process for acting on requests for STAs, waivers and other regulatory relief based on the particular circumstances of the disaster at hand. An expedited process would allow the Commission to ensure that there is a link between the relief being requested and the emergency at issue. During Hurricane Katrina, the Commission publicized its procedures for seeking regulatory relief, granted some relief on its own motion and otherwise processed requests for relief on an expedited basis. Many of these requests were processed within four hours and all were processed within 24 hours.[42] Additionally, Commission rules permit the suspension or waiver of rule requirements on its own motion, STA requests by telephone during emergencies and the grant of station licenses, modification, renewal or STAs without the filing of formal applications in certain emergency situations.[43] Other rules provide additional flexibility for licensees to adjust operations during emergency situations.[44] Therefore, the Commission has procedures in place to

[40] We note that in certain specific instances, it may be appropriate to allow automatic relief of certain regulations based on a Presidentially declared disaster or the activation of a licensee's emergency plan. In fact, there may be circumstances where licensees have received certain types of regulatory relief based on these triggers. Our concerns here relate to establishing a general policy of automatic relief that would apply across the board. We will continue to consider specific requests for regulatory relief based on the underlying facts supporting these requests.

[41] NTIA Ex Parte at 2.

[42] The Commission granted more than 90 STA requests and more than 100 temporary frequency authorizations for emergency workers, organizations and companies to provide wireless and broadcast service in the affected areas and shelters around the country. *See* Written Statement of Kevin J. Martin, Chairman, Federal Communications Commission at Hearing on Public Safety Communications from 9/11 to Katrina: Critical Public Policy Lessons, Before the Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, U.S. House of Representatives (September 29, 2005).

[43] *See, e.g.*, 47 C.F.R. §§ 1.3, 1.915(b), 1.925, 1.931(b)(5).

[44] *See, e.g.*, 47 C.F.R. § 90.407 (providing a self-actuating mechanism whereby private land mobile and public safety licensees may utilize their radio stations for emergency communications in a manner other than that specified in the station authorization or in the rules and regulations governing the operation of such stations, during a period

(continued....)

ensure that waivers and STAs are promptly reviewed and granted during an emergency. Accordingly, we direct PSHSB to work with other Bureaus and Offices, as necessary, to publicize emergency-related rules and procedures prior to disaster. This could be done by, among other things, providing relevant information on PSHSB's website as well as through outreach programs directed at public safety agencies and the industry.[45]

27. Other Pre-Positioning Recommendations From Commenters. Several commenters submitted additional suggestions for improving network resiliency and redundancy.

28. *Permanent Relief from InterLATA Restrictions.* BellSouth[46] recommends that the Commission grant the Bell Operating Companies (BOCs) permanent relief from interLATA boundary restrictions. It argues that such action would enhance network resiliency and redundancy. The BOCs have already raised the issue of relief from Section 272 and its implementing rules in a number of pending forbearance petitions and waiver requests. Accordingly, we will consider this issue in those proceedings as appropriate.

29. *One Year Section 272 Relief.* Last year, WCB granted a one-year Special Temporary Authority from enforcement of Section 272 and its implementing rules to BOCs in order to allow them to share non-public, BOC network information with their Section 272 and other affiliates to engage in disaster planning.[47] In addition, WCB granted Verizon a one-year waiver of Part 64 requirements to allow Verizon to engage in disaster planning with its former GTE company affiliates. The relief for disaster planning ends April 20, 2007 for AT&T[48] and June 9, 2007 for BellSouth, Qwest and Verizon. Verizon and BellSouth argue that the Commission should reconsider the one-year limitation of this relief or change its rules so that an STA or waiver is not necessary. Verizon, for example, states that it will need to conduct disaster planning well beyond June 2007 to prepare for, among other things, next summer's hurricane season.[49]

30. In light of the upcoming hurricane season and the separate tornadoes that recently struck

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of emergency in which the normal communication facilities are disrupted as a result of hurricane, flood, earthquake or similar disaster).

[45] Verizon noted that the Commission granted Verizon Wireless authority to lease spectrum temporarily to vendors operating on CMRS equipment to assist the Department of Defense in the Hurricane Katrina recovery effort. Verizon suggested that the Commission adopt an expedited procedure for temporary spectrum leases. Verizon Comments at 16. However, no such action is necessary because the Commission already has an expedited process for granting short-term leases which allows the grant of leases overnight. *See* 47 C.F.R. § 1.9035(e) (immediate approval procedures for short-term de facto leasing arrangements). Verizon has not shown that this process is insufficient.

[46] We note that, subsequent to filing its comments in this proceeding, BellSouth merged with AT&T. For purposes of this Order, we will refer to BellSouth's comments separately from those filed by AT&T.

[47] *See Petition of AT&T Inc. for Special Temporary Authority and Waiver To Support Disaster Planning and Response*, Order, WC Docket No. 06-63, 21 FCC Rcd 4306 (Wireline Comp. Bur. 2006); *Petition of BellSouth Corporation for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Petition of Verizon for Special Temporary Authority and Waiver To Support Disaster Planning and Response, Petition of Qwest Communications International Inc. for Special Temporary Authority and Waiver To Support Disaster Planning and Response*, Order, WC Docket No. 06-63, 21 FCC Rcd 6518 (Wireline Comp. Bur. 2006).

[48] The Public Safety & Homeland Security Bureau extended the STA to April 27, 2007. *See* Letter from Derek Poarch, Chief, Public Safety & Homeland Security Bureau, FCC, to Frank Simone, Executive Director, Federal Regulatory, AT&T Services, Inc., WC Docket No. 06-63 (issued April 23, 2007).

[49] Verizon Comments at 16.

parts of Kansas and Alabama, we grant an extension of the regulatory relief granted by WCB last year to AT&T, Qwest and Verizon for a period of one-year from the date the originally-granted relief is due to expire.[50] Specifically, we grant AT&T, Verizon and Qwest a one-year STA and waiver of Section 272 of the Act and the Commission's accounting and non-accounting structural separation safeguards. We also extend for an additional year, a waiver previously issued to Verizon to engage in integrated disaster recovery planning with its former GTE affiliates. Under the STA and waiver, AT&T, Qwest and Verizon will continue to be permitted to share non-public BOC network information with its Section 272 affiliates (as well as other affiliates that adhere to the Section 272-like safeguards), as necessary to engage in integrated disaster planning.[51]

31. We find that an extension of the regulatory relief previously accorded these carriers serves the public interest. The unique circumstances of a hurricane, tornado or other disaster warrant a deviation from Section 272 and the accompanying rules, and such deviation will better serve the public interest in a time of emergency. This relief will allow AT&T, Verizon and Qwest to continue to develop risk mitigation strategies and contingency plans that will reduce the likelihood and duration of any service outage and will permit these carriers' networks to continue to operate in the event a "choke point" is compromised.

B. Recovery Coordination

32. Credentialing Guidelines. In the *Notice*, we sought comment on the Katrina Panel's recommendation that the Commission work with other appropriate federal departments and agencies and the communications industry to promptly develop national credentialing requirements and process guidelines to enable communications infrastructure providers and their contracted workers access to affected areas after a disaster. The President's National Security Telecommunications Advisory Committee's (NSTAC's)[52] made similar recommendations to the President last year.[53] The Panel

[50] We note that a broader request for extension of this regulatory relief remains pending. *See* Letter from Terri L. Hoskins, Senior Counsel, AT&T Services, Inc. to Marlene H. Dortch, Secretary, FCC, WC Docket No. 06-63 (filed March 9, 2007) (seeking a two-year extension of the Special Temporary Relief and waiver that the Commission granted AT&T for disaster recovery purposes). In its request, AT&T states that as a result of its merger with BellSouth, BellSouth is an affiliate of AT&T and is included in its request for an extension of the STA and waive relief. *Id*, at 2.

[51] While the Section 272 requirements have sunset for AT&T, Verizon and Qwest, AT&T and Verizon may continue to provide in-region, interstate, interLATA telecommunications services through Section 272 separate affiliates, and these affiliates should be treated as nondominant in the provision of such services. *See Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interstate, Interexchange Marketplace*, CC Docket No. 96-149 and 96-61, Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, 12 FCC Rcd 15756, 15834-35, paras. 133-34 (1997), recon. denied, Second Order on Reconsideration and Memorandum Opinion and Order, 14 FCC Rcd 10771 (1999). In addition, we understand that Qwest has begun implementing the relief granted by the Commission to provide in-region, interstate, interLATA telecommunications services on an integrated basis subject to nondominant carrier regulation. Qwest may be able to benefit from the relief granted here to engage in disaster recovery planning and implementation during its transition from section 272 separation to integrated provisioning and therefore, we continue to include Qwest in granting this relief. *See Petition of Qwest Communications, Inc. for Forbearance form Enforcement of the Commission's Dominant Carrier Rules as They Apply After Section 272 Sunsets*, Memorandum Opinion and Order, WC Docket No. 05-333, 22 FCC Rcd 5207 (2007); *see also* Letter from Boucher, Corporate Counsel, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 00-175 and WC Docket No. 05-333 (filed May 22, 2007).

[52] Bechtel suggests that the Commission spearhead the transfer of network resilience and reliability work currently performed by voluntary bodies like NSTAC or NCC to a formal and professional cross-disciplinary entity with hands-on experience supported by government professionals. Bechtel Comments at 8-9. The Commission does not have authority to transfer work currently performed by NSTAC, a Presidential committee established by Executive

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advocated, however, expanding the NSTAC's credentialing recommendations to include repair workers of all communications infrastructure (*e.g.*, wireline, wireless, Wireless Internet Service Providers (WISPs), cable, broadcasting, and satellite). Further, the Katrina Panel recommended that the Commission work with the communications industry to develop an appropriate basic NIMS training course for communications repair workers that can be completed online as a requirement for credentialing. Additionally, the Katrina Panel recommended that the Commission should: (1) encourage states to develop and implement a credentialing program consistent with NSTAC guidelines as promptly as possible and encourage appropriate communications industry members to secure any necessary credentialing; (2) encourage states to recognize and accept credentials issued by other states; and (3) encourage, but not require, each regional, state and local EOC or JFO to develop credentialing requirements and procedures, consistent with any national credentialing guidelines, for purposes of allowing communications infrastructure providers, their contracted workers and private security teams, if any, access to the affected areas post-disaster.[54]

33. Most commenters generally supported credentialing communications personnel to access affected areas post-disaster. Many stressed that credentialing recommendations should apply to all communications providers, including their contracted workers. In fact, DHS noted that it is making significant efforts to advance the implementation of a national standard for the credentialing of telecommunications repair workers.[55] Commenters were split regarding whether NIMS training should be required as a requirement for credentialing.

34. The Commission's experience with Hurricane Katrina and the record in this proceeding reveal that access to affected areas post-disaster was one of the most critical issues for the communications industry. As the National Response Plan[56] makes clear, DHS has primary responsibility to coordinate federal incident management activities, including disaster site access and credentialing, for all emergency personnel. As such DHS, rather than the FCC, has jurisdiction and authority to adopt credentialing guidelines that apply to the communications industry.

35. DHS and the states have taken a number of steps to develop credentialing guidelines that would allow communications providers access to disaster areas. For example, DHS/NCS worked with the State of Georgia and BellSouth to develop a pilot access program focused on priority access for critical response personnel, including telecommunications, which resulted in the publication of a Georgia Standard Operating Procedure (SOP) for emergency access.[57] This SOP has been distributed as suggested protocol to all 50 states and the territories.[58] DHS/Federal Emergency Management Agency (FEMA) is also working on an access pilot program to give telecommunication repair crews better access to disaster areas and is aggregating documentation for emergency personnel nationwide into a National Emergency Responder Credentialing Program that DHS/FEMA expects to make operational this year.

36. PSHSB staff is already working with DHS to help ensure that any credentialing program

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Order, or NCC which is organized by NCS. The Commission should continue to work with these entities to support their efforts.

[53] The President's National Security Telecommunications Advisory Committee Trusted Access Task Force, *Screening, Credentialing, and Perimeter Access Controls*, p. 9 (January 19, 2005).

[54] *See Katrina Panel Report* at 34.

[55] *See* DHS Comments at 7-8.

[56] *See* NRP, paragraph 15.

[57] *See* DHS Comments at 7.

[58] *Id.*

would encompass critical communications infrastructure repair crews and their contracting support staff and to support coordination with regional, state and local officials regarding the development of consistent credentialing programs for communications providers. We believe the issue of whether to require NIMS training as a requirement for credentialing is best addressed by DHS/NCS and regional, state and local authorities as they develop their credentialing programs. We agree with DHS's assertion that the Commission's credentialing efforts should complement, not supersede or duplicate, those of DHS/NCS.[59] We direct PSHSB to continue to work with DHS and the states on these efforts.

37. Emergency Responder Status for Communications Infrastructure Providers. In the *Notice*, we sought comment on the Katrina Panel's recommendations that the Commission work with Congress and appropriate federal departments and agencies to afford all communications infrastructure providers, including wireline, wireless, WISPs, satellite, cable and broadcast infrastructure providers and their contracted workers emergency responder status under the Stafford Act and to incorporate this designation into the National Response Plan ("NRP") and state and local emergency response plans.[60] Most commenters supported this recommendation and stressed that the emergency responder status should be afforded to all communications service providers.

38. Section 607 of the recently enacted Warning, Alert and Response Network Act (WARN Act) amended the Stafford Act to add the term "essential service provider" which includes entities that provide telecommunications service.[61] This section of the WARN Act also states that, unless exceptional circumstances apply, in an emergency or major disaster, the head of a Federal agency, to the greatest extent practicable, shall not deny or impede access to the disaster site to an essential service provider whose access is necessary to restore and repair an essential service and shall not impede the restoration or repair of telecommunications services.[62] We direct PSHSB to work with DHS, and all other relevant federal, state, tribal and local government agencies, to facilitate: (1) access to disaster areas for communications provider personnel so that recovery efforts can be expedited; and (2) the incorporation into the NRP and state, tribal and local emergency response plans of the designation of telecommunications service providers as "essential service providers." PSHSB should also encourage DHS to seek Congressional action, if necessary, to ensure that the term "essential service provider" includes all communications service providers.

39. Utilization of State/Regional Coordination Bodies. The Katrina Panel recommended that the Commission work with state and local governments and the communications industry (including wireline, wireless, WISP, satellite, cable and broadcasting) to better utilize the coordinating capabilities at regional, state and local Emergency Operations Centers (EOCs), as well as the Joint Field Office (JFO). In particular, the Panel recommended that the Commission encourage, but not require, each regional, state and local EOC and JFO to: (1) facilitate coordination between communications infrastructure providers and state and local emergency preparedness officials (such as the state EOC) in the state or region at the EOC or JFO; (2) develop and facilitate inclusion in state emergency preparedness plans, where appropriate, one or more clearly identified post-disaster coordination areas for communications infrastructure providers, their contracted workers, and private security teams to gather post-disaster where

[59] *See* DHS Comments at 8.

[60] The Panel "support[ed] the NSTAC's recommendation that telecommunications infrastructure providers and their contracted workers be afforded emergency responder status under the Stafford Act and that this designation be incorporated into the NRP, as well as state and local emergency response plans." *See Katrina Report* at 35. However, the Katrina Panel recommended that this be broadened to include all communications infrastructure providers.

[61] Title VI of the Security and Accountability for Every Port Act of 2006, Pub. L. 109-347, § 607 (October 13, 2006) (Warning Alert and Response Network Act, or the "WARN Act").

[62] *Id.*

credentialing, security, escorts and further coordination can be achieved; and (3) share information and coordinate resources to facilitate repair of key communications infrastructure post-disaster.

40. Commenters generally support the recommendation that the Commission work with state and local governments and the communications industry to better facilitate coordination between emergency responders and the communications infrastructure providers. In its comments CTIA recommended that the Commission work with Federal, state and local governments to create a process to establish embarkation points for communications recovery efforts in the wake of a disaster.[63] DHS agrees that it would be advantageous to engage the EOCs and JFOs in support of greater communications crisis preparedness and more effective response planning.[64] DHS asserts, however, that it would be more appropriate, and consistent with mission responsibilities and existing relationships between the entities, for such activities to be coordinated jointly by NCS and DHS/FEMA in the first instance rather than by the FCC. Cingular asserts that the Commission should urge states to refrain from imposing emergency preparedness requirements on the industry.[65] Cingular states that the adoption of state specific requirements, while well intended, hinder recovery efforts by eliminating flexibility and creating a patchwork of inconsistent requirements that carriers must follow.[66]

41. These recommendations generally fall under the jurisdiction of the NCS which, as the coordinator and primary agency for ESF #2 (Communications) of the NRP, performs these functions. The Commission supports these efforts in its role as an ESF #2 support agency. ESF #2 coordinates Federal actions for the restoration of the telecommunications infrastructure and ensures the provision of Federal communications support to Federal, state, tribal, local and private sector response during an Incident of National Significance. NCS assists in the coordination of planning and provision of emergency preparedness communications for the Federal government under all circumstances, including crisis or emergency, attack, recovery and reconstitution. The Commission and other government agencies such as FEMA have also taken a number of steps in this area. The Commission reached out to its licensees to determine their status and needs and provided the collected information to the NCS. The Commission then helped coordinate ESF #2 response efforts to aid the Commission's licensees (*e.g.*, arranged for helicopter overflights, fuel shipments, access, curfew and airport information). The Commission is also working with DHS/NCS to encourage regional, state and local EOCs and/or JFOs to identify post-disaster coordination areas for communications providers and their contract workers and to create a process to establish embarkation points for communications recovery efforts. For example, the Commission assisted DHS with developing proposals making federal property available as a staging area for communications infrastructure providers under the Stafford Act.

42. We direct PSHSB to continue to work with DHS, state, tribal and local governments and the communications industry on these issues. However, we decline to take action to urge the states to refrain from imposing emergency preparedness requirements on the communications industry as Cingular advocates.[67]

43. Priority Utility Restoration for Communications Providers. In its report, the Katrina Panel recommended that the Commission encourage, but not require, each regional, state and local EOC and JFO to facilitate electric and other utilities' maintenance of priority lists that include commercial communications providers for commercial power restoration. The Katrina Panel stated that power

[63] CTIA Comments at 18.

[64] DHS Comments at 8.

[65] Cingular Comments at 7.

[66] *Id.*

[67] Cingular Comments at 9-10.

restoration activities should be coordinated with communications restoration. The majority of commenters support this recommendation.

44. Other agencies, such as DHS, the Department of Energy, and state agencies, have primary jurisdiction and authority over this matter. Loss of power is a critical failure that DHS/NCS is aware of and focused on. For example, NCS coordinates priority lists with the agencies responsible for NRP's Emergency Support Function #12 - Energy. The communications sector is number two on the ESF #12 priority lists. NCS also has tools that can identify communication sites. The agencies responsible for ESF#12 have tools that can locate energy sites near communications providers and determine whether there have been critical failures. Coordination of these priority lists between Emergency Support Functions 2 and 12 is ongoing. We direct PSHSB to support DHS/NCS and the other agencies addressing this issue in their efforts to ensure priority power and other relevant utility restoration for commercial communications providers during and after disasters.

45. Expanding and Publicizing Priority Communications Service Programs. The Katrina Panel recommended that the Commission work with the NCS to promote the use of existing priority communications services, such as Telecommunications Service Priority (TSP), Government Emergency Telecommunications Service (GETS) and Wireless Priority Service (WPS), to all eligible entities, particularly eligible government, public safety, emergency medical community, and critical industry groups.[68] Further, the Katrina Panel stated that the Commission should work with NCS to clarify whether broadcast, WISP, satellite, and cable company repair crews are currently eligible for GETS and WPS and, if so, should also promote the availability of those priority services to those entities. The Katrina Panel also recommended that the Commission work with NCS and industry to establish and promote best practices to ensure that all WPS, GETS, and TSP subscribers are properly trained in how to use these services. Finally, the Katrina Panel recommended that the Commission work with NCS to explore whether it is technically and financially feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities, thus avoiding the need for a WPS caller to also enter GETS information.[69]

46. DHS fully supports the Katrina Panel's recommendation that the Commission work with NCS to promote wider use of GETS, WPS and TSP programs among government, public safety, and critical industry groups.[70] Broadcasters that provided comments support granting broadcasters access to GETS and WPS.[71] Other commenters state that promotion of these programs must be coordinated with industry to ensure that providers can absorb additional demands placed on their networks through increased participation in the programs.[72]

47. PSHSB staff members are actively engaged in priority services outreach. For example, PSHSB staff recently worked with the NCS TSP Program Office, various telecommunications carriers, and the State of New York to enroll over 2,000 circuits into the TSP program. Additionally, PSHSB staff is closely coordinating with the HHS to increase awareness among health care providers, particularly hospitals, about the benefits of enrollment and participation in federal priority service programs. This initiative includes expanded outreach in the health care sector and with state health departments to increase their understanding of TSP, GETS and WPS during and in the aftermath of a natural disaster or other emergency, such as an influenza pandemic. HHS is considering options to better incorporate

[68] *See Katrina Panel Report* at 36.

[69] *Id.*

[70] DHS Comments at 8, n.13.

[71] Gulf States Broadcasters Comments at 6; National Association of Broadcasters Comments at 13.

[72] Cox Reply Comments at 21; NCTA *et al* Comments at 15.

support for these federal priority service programs into their emergency preparedness funding streams. The Commission is also working with hospital associations to educate the medical community about priority communications services.[73] In addition, PSHSB is working with NCS to enhance WPS and resolve the issue of whether it is feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities.

48. We direct PSHSB to continue to work with DHS, including the NCS Committee of Principal's Priority Services Working Group (PSWG), to promote the priority communications services to all eligible entities, particularly eligible government, public safety, emergency medical community, and critical industry groups, including repair crews which could qualify under the eligibility criteria for both WPS and GETS under the category of disaster recovery. PSHSB should work with DHS to ensure that communications systems' capabilities are not overwhelmed by increased demands placed on networks by increased participation in these programs. We also direct PSHSB to support the creation and promotion of best practices to ensure proper training in how to use these services. Finally, we direct PSHSB to continue working with DHS and NCS's PSWG to enhance WPS and resolve the issue of whether it is feasible for WPS calls to automatically receive GETS treatment when they reach landline facilities.

49. Broadening NCC to Include All Communications Infrastructure Sectors. The Katrina Panel recommended that the Commission work with the NCS to broaden the membership of the NCC to include adequate representation of all types of communications systems, including broadcast, cable, satellite and other new technologies, as appropriate. The NCC is a government and industry organization within DHS/NCS. It functions at the operational level and assists in initiating, coordinating, restoring and reconstituting national security and emergency preparedness (NS/EP) telecommunications services or facilities under all conditions of crises and disasters.

50. In January 2000, the NCC was designated an Information Sharing and Analysis Center (ISAC) for Telecommunications in accordance with Presidential Decision Directive 63.[74] The NCC-ISAC facilitates the exchange among government and industry participants regarding vulnerability, threat, intrusion, and anomaly information affecting the telecommunications infrastructure. Since its creation, the NCC has coordinated the restoration and provisioning of national security and emergency preparedness telecommunication services and facilities during natural disasters and armed conflicts. The NCC leverages its unique joint government/industry structure and all-hazard emergency response capabilities to coordinate the initiation, restoration, and reconstitution of United States government national security and emergency preparedness telecommunications services both nationally and internationally.[75]

51. DHS fully supports the Katrina Panel's recommendation that the Commission work with NCS to broaden the membership of the NCC.[76] DHS states that NCS is already working with the members of industry to explore expansion of NCC membership and would welcome the Commission's engagement in this area.[77] Several additional commenters support this recommendation.[78]

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[73] *See supra* at para. 15, for more information regarding the PSHSB's outreach to hospital associations and the emergency medical community regarding emergency communications.

[74] The Clinton Administration's Policy on Critical Infrastructure Protection: Presidential Decision Directive 63, White Paper (May 22, 1998).

[75] *See* http://www.ncs.gov/ncc.

[76] DHS Comments at 8, n.13.

[77] *Id.*

52. In coordination with DHS/NCS, PSHSB is currently engaged in efforts to make the NCC more of an overall communications information sharing and analysis center instead of one focused solely on telecommunications. The Commission is working with communications trade groups and broadcasters, among others, to encourage them to consider NCC membership. Recently, a fiber optic provider the Commission introduced to the NCC signed up for membership as did APCO, COMPTEL, Global Crossing, and Cox Cable. We direct PSHSB to continue its efforts in this area.

53. Website for Emergency Coordination. The Katrina Panel recommended that the Commission create a website identifying the key state emergency management contacts, particularly for communications coordinating bodies, and post-disaster coordination areas for communications providers. Some commenters support the proposal that the Commission create a disaster response website for communications providers; other commenters state that this function is best suited for other agencies, such as FEMA or DHS.

54. FEMA and many states already have publicly available information identifying key state emergency management contacts. FEMA's website has a compilation of state emergency contacts (http://www.fema.gov/about/contact/statedr.shtm) and the NCC website (http://www.ncs.gov/ncc) has links to federal agencies. Accordingly, we do not believe it is necessary for the Commission to create a similar website.

55. To facilitate access to this information by communications companies, we direct PSHSB to coordinate with FEMA to provide updated links to the relevant state emergency contact information contained on the FEMA website. Specifically, PSHSB should create a link on its website to FEMA's listing of state emergency contact information.

56. FCC Website for Emergency Response Team Information. The Katrina Panel recommended that the Commission create a website to publicize the Commission's emergency response team's contact information and procedures for facilitating disaster response and outage recovery. Commenters unanimously support the Katrina Panel's recommendation. Commenters contend that the Commission should maximize existing resources by developing and posting on the Commission's website the Commission's emergency response team's contact information and procedures.

57. We agree that a website providing emergency contact information, procedures for facilitating disaster response and outage recovery, and procedures for obtaining regulatory relief during emergencies would be helpful. We direct PSHSB to work with other Bureaus and Offices, as appropriate, to do so.

58. Other Recovery Coordination Recommendations. Commenters submitted the following suggestions for improving the recovery coordination process:

59. *Expedited Importation of Essential Communications Technology.* Iridium Satellite LLC suggests that the Commission work with other federal agencies to establish a system that facilitates the delivery of replacement infrastructure and equipment during a disaster.[79] Additionally, Inmarsat asserts that, as part of creating redundancy, the federal government should recognize the importance of, and encourage the building of, mobile units that can be deployed as needed to any given disaster zone to assist

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[78] *See, e.g.*, Gulf State Broadcasters Comments at 3-4; AT&T Comments at 5; Cox Reply Comments at 20-21; Motorola Comments at 9; NCTA *et al* Comments at 10-11; PRT Comments at 10; Qwest Comments at10; SIA Comments at 13; USA Mobility Comments at 15; Verizon Comments at 21.

[79] Iridium Comments at 6-7.

in rapid restoration of vital communications using Mobile Satellite Service.[80] These functions are covered by ESF #2. The Commission is already working with other agencies to support these functions and will continue to coordinate with DHS/NCS and other agencies regarding these matters. Inmarsat also asserts that the Commission should work with U.S. Customs to ensure that bottlenecks do not slow the importation of essential communications technology in the aftermath of a disaster.[81] Inmarsat and other satellite operators apparently experienced a sharp rise in demand after Hurricane Katrina that could not be met by the existing stock of satellite terminals in the U.S.[82] We direct PSHSB to coordinate with DHS/NCS, U.S. Customs and other appropriate agencies to develop a systematic approach toward the importation of communications equipment needed for disaster response in the wake of disasters.

60. *Real Time Tracking of Progress and Shared Experiences.* Champaign Urbana Wireless Network, The Texas ISP Association, The Association for Community Networking, and Acorn Active Media (CUWN, et al.) suggest that the Commission provide a means by which communications responders could record their progress, share experiences in real time and avoid accidental conflicts. This function is primarily a responsibility of DHS/NCS under ESF #2 and PSHSB should continue to coordinate with DHS/NCS regarding these matters.

C. First Responder Communications

61. Emergency Restoration Supply Cache and Alternative Inventory. To facilitate the restoration of public safety communications, the Panel recommended that the Commission: (1) support the ongoing efforts of the NCC to develop and maintain a database of state and local public safety system information, including frequency usage, to allow for more efficient spectrum sharing, rapid on-site frequency coordination, and emergency provision of supplemental equipment in the event of system failures; (2) support the efforts of the NCC to develop an inventory of available communications assets (including local, state, federal civilian and military) that can be rapidly deployed in the event of a catastrophic event[83] and work with the NCC and the appropriate agencies to educate key state and local emergency response personnel on the availability of these assets and how to request them; and (3) coordinate with the NCS/NCC to assure that, immediately following any large disaster, there is an efficient means by which federal, state and local officials can identify and locate private sector communications assets that can be made rapidly available to first responders and relief organizations. The Katrina Panel noted that one means by which to identify and locate private sector communications assets would be a website maintained by either the FCC or NCC through which the private sector could register available assets along with product information and stated that such a website should be designed with a special area for registering available equipment to assist persons with disabilities in their communications needs.[84]

62. *Support NCC Efforts to Develop a Database of State and Local Public Safety System Information.* PSHSB has already provided support for the NCC's ongoing efforts to develop and maintain a database of state and local public safety system information. With assistance from PSHSB, the NCC has developed a public safety first responder frequency sharing guide. PSHSB consulted private frequency coordinators and collected and coordinated information from them for this effort. Additionally, although it was only developed for the states affected by Hurricane Katrina, FEMA recently developed a

[80] Inmarsat Comments at 8.

[81] *Id.* at 7.

[82] *Id.*

[83] The Katrina Panel stated that the list should include land mobile radios, portable infrastructure equipment, bridging technologies/gateways, and backup power system components and the information should include the steps necessary for requesting the deployment of these assets. *See Katrina Panel Report* at 38.

[84] *Katrina Panel Report* at 38.

Gulf Coast communications plan for use during emergencies that identifies all public safety equipment and spectrum currently in use.

63. *Coordinate with NCC to Facilitate the Availability of Communications Assets for First Responders Post-Disaster.* The Commission already coordinates with the NCS/NCC to assure that, following any large disaster, there is an efficient means by which federal, state and local officials can identify and locate private sector communications assets that can be made rapidly available to first responders and relief organizations. PSHSB has been providing a supporting role to FEMA on this issue. For example, per FEMA's request, PSHSB recently set up a meeting between FEMA and communications industry representatives to discuss, among other things, contingency contracts for equipment and the identification of equipment that can be airlifted through the Department of Defense. PSHSB already supports the efforts of the NCC to develop an inventory of available communications assets, in 2006 the NCS began development of an inventory database of government and industry assets. This inventory database of available government and industry communications assets developed by NCC and available to ESF #2 addresses this recommendation. Regarding a website, a function already exists whereby industry can report their available assets directly to the NCC.[85]

64. We direct PSHSB to continue to work with DHS, NCS, NCC, FEMA, state governments, and industry on these issues. We also direct PSHSB to continue to work with NCC to address the Katrina Panel recommendation regarding the identification of private sector communications assets, including specifically identifying equipment available to assist persons with disabilities in their communications needs.

65. *Equipment Cache.* Another Katrina Panel recommendation intended to facilitate the restoration of public safety communications includes that the Commission encourage state and local jurisdictions to retain and maintain, including through arrangements with the private sector, a cache of equipment components that would be needed to immediately restore existing public safety communications within hours of a disaster. The Katrina Panel stated that the cache should: (1) include the necessary equipment to quickly restore communications capabilities on all relevant mutual aid channels; (2) be maintained as a regional or state-wide resource, and located in areas protected from disaster impacts; and (3) be included as an element of the NRP. Further, the Katrina Panel recommended that the Commission encourage state and local jurisdictions to utilize the cache through training exercises on a regular basis.[86]

66. In its comments, DHS stated that it has reservations about the recommendation concerning the stockpiling of equipment. DHS noted that already limited budgets do not provide funding to procure additional equipment and, in many cases, the redundant equipment for network restoration is often unavailable because the systems at issue are legacy systems that are obsolete and no longer supported by manufacturers.[87] We agree. The Commission is reluctant to encourage state and local jurisdictions to maintain such a cache of equipment unless funding for such an effort has been specifically identified. Many local jurisdictions do not have the requisite funds for this effort. Although some states have such equipment under "mutual aid agreements," most states do not have funds for equipment not in use; their funds are used for equipment intended for immediate use. Further, there are already a number of training exercises for responders. For example, there are regional annual training exercises held to

[85] For security purposes, industry groups or entities advise the NCC of assets and the NCC inputs the information directly into the database.

[86] *Katrina Panel Report* at 37.

[87] DHS Comments at 9.

demonstrate equipment in a disaster and to show options for restoration.[88]

67. Facilitating First Responder Communications Capabilities. To facilitate interoperability among first responder communications, the Katrina Panel recommended that the Commission: (1) maintain the schedule for commencing commercial spectrum auctions by January 28, 2008 to fully fund the $1 billion public safety interoperability program, consistent with recent legislation; (2) work with NTIA and DHS to establish appropriate criteria for the distribution of the $1 billion in a manner that best promotes interoperability with the 700 MHz band - among other things, such criteria should mandate that any radios purchased with grant monies must be capable of operating on 700 MHz and 800 MHz channels established for mutual aid and interoperability voice communications; (3) encourage the expeditious development of regional plans for the use of 700 MHz systems and move promptly to review and approve such plans; (4) expeditiously approve any requests by broadcasters to terminate analog service in the 700 MHz band before the end of the digital television transition in 2009 in order to allow public safety users immediate access to this spectrum; (5) work with the NTIA and DHS to develop strategies and policies to expedite allowing Federal (including the military), state and local agencies to share spectrum for emergency response purposes, particularly the Federal incident response channels and channels established for mutual aid and interoperability; and (6) publicize interoperability successes and/or best practices by public safety entities to serve as models to further interoperability.

68. *Schedule for 700 MHz Spectrum Auction.* We agree that the Commission should, consistent with recent legislation, maintain the schedule for commencing commercial spectrum auctions in the 700 MHz bands by January 28, 2008.[89] Accordingly, the Commission should proceed with current plans for developing auction rules and procedures, including the conclusion of a pending rulemaking addressing the commercial 700 MHz spectrum. The Commission will commence auction of this spectrum in a manner consistent with the Digital Television Transition and Public Safety Act of 2005.

69. *Criteria for the Distribution of the $1 Billion Public Safety Interoperability Program.* We direct PSHSB to offer to work with NTIA and DHS, as appropriate, to establish criteria for the distribution of the $1 billion interoperability fund in a manner that best promotes interoperability with the 700 MHz band. No commenter opposed the idea of the FCC offering to work with NTIA and DHS in this regard. Although the statute places responsibility for implementing this grant program upon NTIA and DHS, the Commission could provide helpful input. We believe, however, that such funds should not be limited to the 700 MHz and 800 MHz bands and that the PSHSB should encourage NTIA and DHS to explore ways to use IP technology to facilitate interoperability with VHF and UHF. An IP-based approach would allow legacy systems to evolve into a broadband communications system. Additionally, any action relating to the 700 MHz band should include consideration of DHS' concern that the Katrina Panel's recommendations are focused only on state and local communications with little standardization across regions and, therefore, fail to address the need to incorporate federal coordination with state and local first responders into the solution.

70. *Expeditious Development, Review and Approval of Regional Plans.* We direct PSHSB to encourage, as part of their outreach efforts, the expeditious development of regional plans for use of 700 MHz systems and to promptly review and, where possible, approve such plans when submitted. This received strong support in the record. PSHSB should initiate outreach efforts to encourage states, tribal governments and localities to participate in the regional planning processes. PSHSB can work with

[88] E.g., National Communications System's Emergency Support Function 2 Training Conference, Homestead Air Reserve Base, Homestead, Florida (May 20-26, 2006).

[89] The Commission is required, under the Digital Television Transition and Public Safety Act of 2005, to commence the auction no later than January 28, 2008. *See* 47 U.S.C. § 309(j)(15)(C)(v), (vi), as enacted by the Digital Television Transition and Public Safety Act of 2005, Title III of the Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4, 22, § 3003(a)(2)(2006) ("Digital Television Transition and Public Safety Act of 2005").

regional planning committees in their efforts to develop regional plans and coordinate their plans with adjacent regions.

71. *Requests by Broadcasters to Terminate Analog Service in the 700 MHz Band.* Although we understand the importance of ensuring access to this spectrum by public safety agencies as quickly as possible, we must balance this goal with the need to protect consumers who could potentially lose service if they have not yet obtained digital televisions or converters. Accordingly, although we will endeavor to process requests from broadcasters to terminate analog service as quickly as possible, we will continue to review such requests pursuant to the policies previously adopted in *Upper 700 MHz Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*.[90]

72. *Sharing of Spectrum.* We agree that implementation of the recommendation that the Commission work with NTIA and DHS to develop strategies and policies to expedite allowing Federal, state and local agencies to share spectrum for emergency response purposes would serve the public interest. We direct PSHSB, together with the Office of Engineering and Technology, to work with NTIA and DHS on this issue. There is record support for the Commission working with NTIA and DHS to allow Federal and non-Federal spectrum sharing for emergency response purposes, both in spectrum allocated for Federal and non-Federal uses.[91] NTIA states in its comments that it and the Interdepartment Radio Advisory Committee ("IRAC") already are considering a proposal to revise current rules to allow more flexible use by state and local governments, and to simplify the regulations governing the use of Federal interoperability channels.[92] The Commission should assist in these ongoing efforts in the IRAC and its subcommittees and should consider other possible solutions for making spectrum available for shared use by federal, state, tribal and local agencies for emergency response purposes.

73. *Publicizing Interoperability Successes and Best Practices.* We direct PSHSB to work with other federal agencies, the public safety community and the industry, as appropriate, to develop best practices to promote interoperability. In addition, PSHSB should encourage public safety organizations to provide interoperability success stories and make this information available on its website.

74. Resiliency and Restoration of E-911 Infrastructure and PSAPs. In order to ensure a more robust 911 and E-911 service, the Katrina Panel recommended that the Commission encourage the implementation of the following three best practices issued by the Network Reliability and Interoperability Council (NRIC):

(1) Service providers and network operators should consider placing and maintaining 911 circuits over diverse interoffice transport facilities (*e.g.*, geographically diverse facility routes, automatically invoked standby routing, diverse digital cross-connect system services, self-healing fiber ring topologies, or any combination thereof).[93]

(2) Network operators, service providers, equipment suppliers and public safety authorities should establish alternative methods of communication for critical

[90] Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, Carriage of the Transmissions of Digital Television Broadcast Stations, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 99-168, CS Docket No. 98-120, MM Docket No. 00-83, 15 FCC Rcd 20845, 20871, ¶ 62 (2000).

[91] *See, e.g.*, BellSouth Comments at 20.

[92] NTIA Ex Parte at 1.

[93] *See NRIC VII Recommendation 7-7-0566*

personnel.[94]

(3) Service providers, network operators and property managers should ensure availability of emergency/backup power (*e.g.*, batteries, generators, fuel cells) to maintain critical communications services during times of commercial power failures, including natural and manmade occurrences (*e.g.*, earthquakes, floods, fires, power brown/blackouts, terrorism). The emergency/backup power generators should be located onsite, when appropriate.[95]

75. We agree that PSHSB should be proactive in encouraging implementation of the first two of these NRIC recommendations, for example, through additional outreach efforts which could include, *inter alia*, NRIC best practice outreach efforts, promoting industry guidelines on its website, and working with FEMA to educate PSAP managers in disaster management, PSAP rerouting, and the National Incident Management System. This is consistent with the recommendations of both NRIC and the Katrina Panel that these best practices be encouraged, but not required. No commenters asserted that there is a need to make these best practices mandatory at this time. Additionally, there may be legitimate concerns that implementation of diverse 911 circuits would be cost-prohibitive in certain cases.

76. NENA recommends that "the FCC or the state commissions, as appropriate, require all telephone central offices to have an emergency back-up power source."[96] St. Tammany's Parish Communications District 1 emphasizes the need for wireline providers to have backup procedures in place.[97] Several commenters supported this voluntary best practice and indicated that they have backup power available at their facilities. For example, AT&T agrees that it is important to have backup power to ensure the continued operation of the nation's 911 system during disasters and states that it looks forward to helping implement the Katrina Panel's recommendation that the Commission encourage the implementation of the NRIC backup power best practice.[98] AT&T reported that all of its central offices are equipped with backup batteries and/or diesel generators.[99] Verizon also stated that every critical component in its networks is protected by automatic power back-up systems.[100]

77. We agree with NENA's and St. Tammany Parish's suggestion and find that adoption of this requirement serves the public interest. Accordingly, pursuant to our authority under Section 1 of the Communications Act, as amended,[101] we will require all local exchange carriers (LECs), including incumbent LECs (ILECs) and competitive LECs (CLECs), as well as commercial mobile radio service (CMRS) providers to have an emergency back-up power source for all assets that are normally powered from local AC commercial power including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote switches and digital loop carrier system remote terminals that normally are powered from local

[94] *See NRIC VII Recommendation 7-7-1011.*

[95] *See NRIC VII Recommendation 7-7-5204.*

[96] NENA Comments at 6.

[97] St. Tammany's Parish Communications District 1 asserts that "it is imperative that the LEC, CLECs, and wireless telephone providers be required to demonstrate they have adequate backup procedures in place." St. Tammany Parish Communications District 1 Comments at 2.

[98] AT&T Comments at 2.

[99] AT&T Comments at 13.

[100] Verizon Comments, at 7-8.

[101] 47 U.S.C. § 151.

AC commercial power.

78. Our expectation is that this requirement will not create an undue burden since several reported in their comments that they already maintain emergency back-up power. We realize, however, that this requirement may present a financial burden to some small carriers. Accordingly, we will not impose this requirement on LECs (including both ILECs and CLECs) that meet the definition of a Class B company as set forth in Section 32.11(b)(2) of the Commission's rules.[102] We will also not apply this requirement to non-nationwide CMRS providers with no more than 500,000 subscribers.[103]

79. For the same reasons set forth in ¶75, we find that PSHSB should be proactive in encouraging implementation, by all other communications providers, of the third NRIC recommendation set forth above in ¶74 which states that communications service providers, network operators and property managers should ensure the availability of emergency/backup power.

80. The Katrina Panel also recommended that the Commission encourage the implementation of an NRIC best practice that states that network operators should consider deploying dual active 911 selective router architectures to enable circuits from the caller's serving end office to be split between two selective routers in order to eliminate single points of failure. This NRIC best practice further states that diversity should also be considered on interoffice transport facilities connecting each 911 selective router to the PSAP serving end office.[104] Some commenters asserted that selective routers represent technology whose time has passed.[105] NENA contends that deployment of a dual selective router at this point should be done only if particular circumstances strongly favor such an approach.[106]

81. PSHSB should neither encourage nor mandate implementation of this NRIC best practice. We agree with the many commenters who advocated that public safety communications planning, including the 911 infrastructure, instead should move to incorporate IP-based technologies.[107] This will enable the public safety community to focus on future needs rather than requiring more from legacy systems, offer more redundancy and flexibility, and contribute greatly to improving compatibility between public safety systems that operate using different proprietary standards.

82. *Grant Eligibility.* We agree with the recommendation of the Katrina Panel that the FCC urge federal grant programs to permit state or local 911 commissions or emergency communications districts that provide 911 or public safety communications services to be eligible to apply for 911

[102] Section 32.11 provides that Class B companies are those companies that have annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold. 47 C.F.R. § 32.11. The Wireline Competition Bureau recently announced that the 2006 revenue threshold for Class A to Class B companies is $134 million. *Public Notice*, "Annual Adjustment of Revenue Thresholds," DA 07-1706 (WCB, April 12, 2007). Although Section 32.11, by its terms, applies only to ILECs, we are applying the same revenue categories to CLECs for the purpose of the exception to this requirement.

[103] Although this standard is based on the Tier III CMRS definition which is defined as non-nationwide CMRS providers with no more than 500,000 subscribers as of the end of 2001, we note that we are not exempting from this requirement those non-nationwide CMRS providers that have grown to exceed the 500,000 subscriber threshold since 2001 as we believe that such providers are at a size where they should be able to comply with the emergency back-up power rule.

[104] *See NRIC VII Recommendations 7-7-0571.*

[105] AT&T Comments at 12-14; Cisco Comments at 4-7.

[106] NENA Comments at 4-5.

[107] AT&T Comments at 12-14; Cisco Comments at 4-7; NENA Comments at 3-5; St. Tammany Parish Communications District 1 Comments at 3; Texas Commission on State Emergency Communications and the Texas 9-1-1 Alliance (Texas 9-1-1 Entities) Comments at 2-5; TDI Reply Comment at 15-16.

enhancement and communications enhancement/interoperability grants. This recommendation also received strong support from APCO and NENA. We, therefore, direct PSHSB to consult with DHS and administrators of other applicable federal grant programs to explore this possibility. We caution, however, that PSHSB refrain from advocating any particular funding approach for state, tribal or local 911 commissions. Our goal is to support state, tribal and local 911 commissions in their efforts to enhance the redundancy, interoperability, and resiliency of their operations.

83. *Secondary Back-Up PSAPS.* The Katrina Panel also stated that the Commission should recommend the designation of a secondary back-up PSAP that is more than 200 miles away to answer calls when the primary and secondary PSAPs are disabled.[108] Most commenters, including APCO and NENA, did not support this recommendation.[109] APCO asserts that PSAPs 200 miles away would have difficulties with dispatch and that a better approach would be to have "mirrored" telephone central offices at remote locations. We decline to implement this Katrina Panel recommendation. Use of back-up PSAPs should be based on capabilities, common vulnerabilities and technical capabilities, not an arbitrary distance. Geographic remoteness is only one consideration; other considerations include the probability of disaster affecting both PSAPs, size of the PSAPs, the level of technology used at both PSAPs, radio interoperability, availability of operating support systems, and logistics for transporting and staffing PSAP personnel familiar with the geographic area covered by the disaster.

84. Other Recommendations Regarding First Responder Communications. Various commenters submitted additional recommendations for addressing first responder communications issues. We will address those issues below.

85. *Relocation of Existing Licensees on Interoperability Channels.* The Tennessee Statewide Interoperability Executive (the Tennessee SIEC) asserts that the Commission should move existing licensees on the VHF and UHF interoperability channels so that such channels are available for interoperability usage and do not have to compete with grandfathered dispatch operations or secondary telemetry, etc. The Tennessee SIEC also suggested that the Commission eliminate licensing of the interoperability channels for any purpose other than interoperability.

86. When the Commission designated the VHF and UHF interoperability channels, it sought to balance the need for improved interoperability capabilities below 512 MHz with the need to minimize the impact on incumbent licensees. The Commission therefore "grandfathered" incumbent licensees on a secondary basis only to interoperability communication rather than ordering them to vacate the channels or use them exclusively for interoperability purposes.[110] With regard to new licenses, the rules provide that these frequencies will be available primarily for interoperability-only communications.[111] We decline to amend our rules at this time to move existing licensees on the VHF and UHF interoperability channels. Instead, we find that a prudent approach would be first to consult with public safety coordinators.

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[108] *Katrina Panel Report* at 39. The Panel noted that this "requires the FCC to eliminate any regulatory prohibition against the transport of 911 across LATA boundaries. As noted supra at ¶28 with respect to whether the Commission should grant carriers permanent relief from interLATA boundary restrictions as a way to enhance network resiliency, the BOCs have already raised the issue of relief from Section 272 and its implementing rules in a number of pending forbearance petitions and waiver requests. We will consider this issue in those proceedings as appropriate.

[109] *See, e.g.*, APCO comments at 5; NENA comments at 7-8.

[110] *The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, Establishment of Rules and Requirements For Priority Access Service*, WT Docket No. 96-86, Third Memorandum Opinion and Order and Third Report and Order, 15 FCC Rcd 19844, 19844-45 (2000).

[111] 47 C.F.R. § 90.20 (d)(80).

Accordingly, we direct PSHSB to consult the public safety frequency coordinator community through the Public Safety Communications Council to determine the extent of the problem, if any, and whether moving grandfathered licensees at this time would be feasible, and if so, how.

87. *Use of a Standard Continuous Tone Coded Squelch System.* The Tennessee SEIC suggested that the Commission mandate the use of a standard Continuous Tone Coded Squelch System ("CTCSS") to promote interoperability and minimize disruption at a disaster scene. We decline to initiate a rulemaking to implement Tennessee SEIC's suggestion at this time. The Commission has designated 5 VHF frequencies and 4 UHF channel pairs for interoperability use nationwide. Generally, VHF and UHF *analog* public safety radios include the CTCSS feature. Each radio "listens" for CTCSS tones transmitted by base stations, mobiles, or portables. If the tone is present, the user hears the communications directed to him/her, but other transmissions on the same frequency using a different CTCSS tone (or lacking a tone) are muted (squelched). Because these frequencies also have grandfathered, non-interoperable licensees, mandated use of a standard CTCSS on these channels would exclude (*i.e.*, tune out) these incumbents. Use of different tone coded squelch frequencies on the interoperability channels could prohibit units from different jurisdictions from communicating at the scene of a disaster, which undermines the purpose of interoperability. Mandating a common CTCSS tone could impose unwarranted economic burdens by requiring the purchase of additional equipment or modification of existing equipment to employ such a tone. A mandated, common CTCSS also could adversely impact grandfathered licensees operating on the VHF and UHF interoperability channels.

88. There is not enough information in the record to recommend a rulemaking at this point. However, it would be prudent to consult with the public safety frequency coordinators to ascertain the scope of the problem and determine whether Commission action is warranted. We therefore direct PSHSB to consult with public safety frequency coordinators and ask them to study this proposal and provide further input to the Commission.

89. *Statewide Channels.* The Tennessee SIEC advocates that, in order to help states keep their statewide channels clear, the Commission should allow state agencies to provide FCC designated frequency coordinators with a list of FCC designated "Statewide" channels for protection within 35 to 50 miles of the state border depending upon terrain protection.[112] We direct PSHSB to consult with public safety coordinators on the problem of keeping statewide channels clear.

90. *Licensees Adjacent to Interoperability Channels.* The Tennessee SIEC also advocates that the Commission mandate that the wideband licensees adjacent to the VHF/UHF interoperability channels move to narrowband emission to minimize interference to interoperability channels. We note our rules already require that this be done.[113] Accordingly, no further action is necessary at this time.

91. *Designation of 155.370 MHz as a Nationwide Inter-agency Channel.* The Tennessee SIEC also advocates that the Commission designate 155.370 MHz as a nationwide inter-agency channel and implement a CTCSS tone to minimize interference.[114] We refrain, at this time, from initiating a rulemaking to amend our rules to designate 155.370 MHz as an inter-agency channel nationwide and implement a CTCSS tone to minimize interference. Designating this public safety frequency as an inter-agency channel nationwide may have a significant impact on existing incumbents on this frequency and adjacent channel incumbents. Overcoming interference concerns, particularly since VHF spectrum is

[112] *See* Tennessee SEIC Comments at 1 (July 31, 2006).

[113] 47 C.F.R. § 90.209(b)(5) n.3, (b)(6); *see also Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended*, WT Docket No. 99-87, Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd. 3034 (2003).

[114] *See* Tennessee SEIC Comments at 2 (July 21, 2006).

traditionally congested, may prove challenging. The potential impact on existing licensees, including increased equipment costs, outweighs any benefits of designating a sixth VHF frequency for interoperability. We also note that the existing nationwide inter-agency channels were recommended by the four public safety coordinators and were adopted by the Commission partly because these were the "least licensed."

92. *Common Nomenclature.* The Tennessee Statewide Interoperability Executive and others recommend that the Commission mandate a common nomenclature for the designated interoperability channels and require each state to have a functional Statewide Interoperability Executive Council.[115] These issues were raised in the 7th NPRM in WT Docket No. 96-86 and we will address them in that proceeding.[116]

93. *Mutual Aid Channels.* The Tennessee SIEC also stated that the Commission should encourage public safety frequency coordinators to keep designated Fire mutual aid channels (*i.e.* 154.265, 154.280, 154.295 MHz) and their narrowband counterparts and the National Law Enforcement Channel (*i.e.* 155.475 MHz) for mutual aid only.[117] We refrain from concluding that the Commission should encourage public safety frequency coordinators to keep designated mutual aid channels for aid only, until the Commission can engage the public safety frequency coordinator community further on this issue. These frequencies have special limitations that make them available for specified mutual aid purposes, but the Tennessee SIEC suggests that the public safety frequency coordinators currently approve the use of these frequencies for non-mutual aid purposes. In order to evaluate the merits of this proposal, the Commission should consult with the public safety frequency coordinator community through the Public Safety Communications Council. Accordingly, we direct PSHSB to engage in such consultation and provide a recommendation on this issue.

94. *911 Analysis.* NENA asserts that the Commission should require all 911 system service providers (SSPs) to analyze and provide detailed information on the redundancy, resiliency, and dependability of 911 networks and to provide detailed information to the Commission on areas where these issues are treated in the network and areas where there are gaps.[118] NENA states that all 9-1-1 SSPs should be required to submit a plan to the Commission outlining this information and steps they intend to take to ensure diversity and dependability in the network, including any plans they have to migrate their network to an IP-based platform that will enable the migration from the existing 911 system to next generation 911 architecture. NENA also argues that these plans should be made available to leading public safety organizations.[119]

95. AT&T asserts that NENA's proposal is misdirected because it is the PSAP, not the service provider, that must determine the best way to mitigate single points of failure within its 911 network in a cost effective manner.[120] Similarly, the United States Telecom Association (US Telecom)

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[115] Tennessee State Interoperability Executive Committee Comments at 2 (July 21, 2006).

[116] *See Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010*, WT Docket No. 96-86, Fifth Memorandum Opinion and Order, Sixth Report and Order and Seventh Notice of Proposed Rulemaking, 20 FCC Rcd 831, 854-58, ¶¶ 57-61, 64-68 (2005).

[117] Tennessee State Interoperability Executive Committee Reply Comments at 1 (July 31, 2006).

[118] NENA Comments at 5-6; St. Tammany Parish Communications District 1 Comments at 2.

[119] *Id.*

[120] AT&T Reply Comments at 3-4. AT&T recommends that PSAPs "routinely review their 911 networks with the service providers and identify points where facilities are not diverse." AT&T Comments at 12-13; AT&T Reply Comments at 3-4.